DOCUMENT RESUME

ED 047 921 24 RE 003 433

AUTHOR	Gaa, John Powers
TITLE	Goal-Setting Behavior, Achievement in Reading, and Attitude Toward Reading Associated with Individual Goal-Setting Conferences. (Part 2 of Two Parts.)
INSTITUTION	Wisconsin Univ., Madison. Research and Development Center for Cognitive Learning.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
REPORT NO	TR-142-2
BUREAU NO	BR-5-0216
PUB DATE	Sep 70
CONTRACT	OEC-5-10-154
NOTE	82p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Beginning Reading, Behavior Change, Conferences, Educational Attitudes, *Elementary School Students, *Goal Orientation, *Individual Counseling, Objectives, *Reading Achievement, Reading Development, Reading Instruction, *Reading Research, Student Attitudes, Student Behavior

ABSTRACT

Part 2 of a study designed to investigate the effects of individual goal-setting conferences on attitude toward reading and on reading achievement reports discussion of the findings, appendixes including materials and tests used, and a bibliography. Two parallel studies were conducted, the first using third and fourth graders and the second using first and second graders. Subjects were blocked by sex and previous reading achievement and assigned to three treatment groups: (1) individual goal-setting conferences, (2) individual conferences without goal-setting, and (3) control. All groups had the same classroom treatment. Reading achievement was tested by an experimenter-devised test and by appropriate subtests of the Wisconsin Tests of Reading Skill Development. Attitude was measured by the Primary Pupil Reading Attitude Inventory and by an experimenter-devised scale. Effects of goal-setting were also measured. The results showed that pupils in group 1 set fewer goals, experienced less discrepancy between goals set and achieved, but also indicated less confidence in the ability to achieve goals. With respect to reading achievement, younger children showed significant differences on standardized and experimenter-designed measures, but older children did not. No significant differences in attitude were found. (Author/MS)

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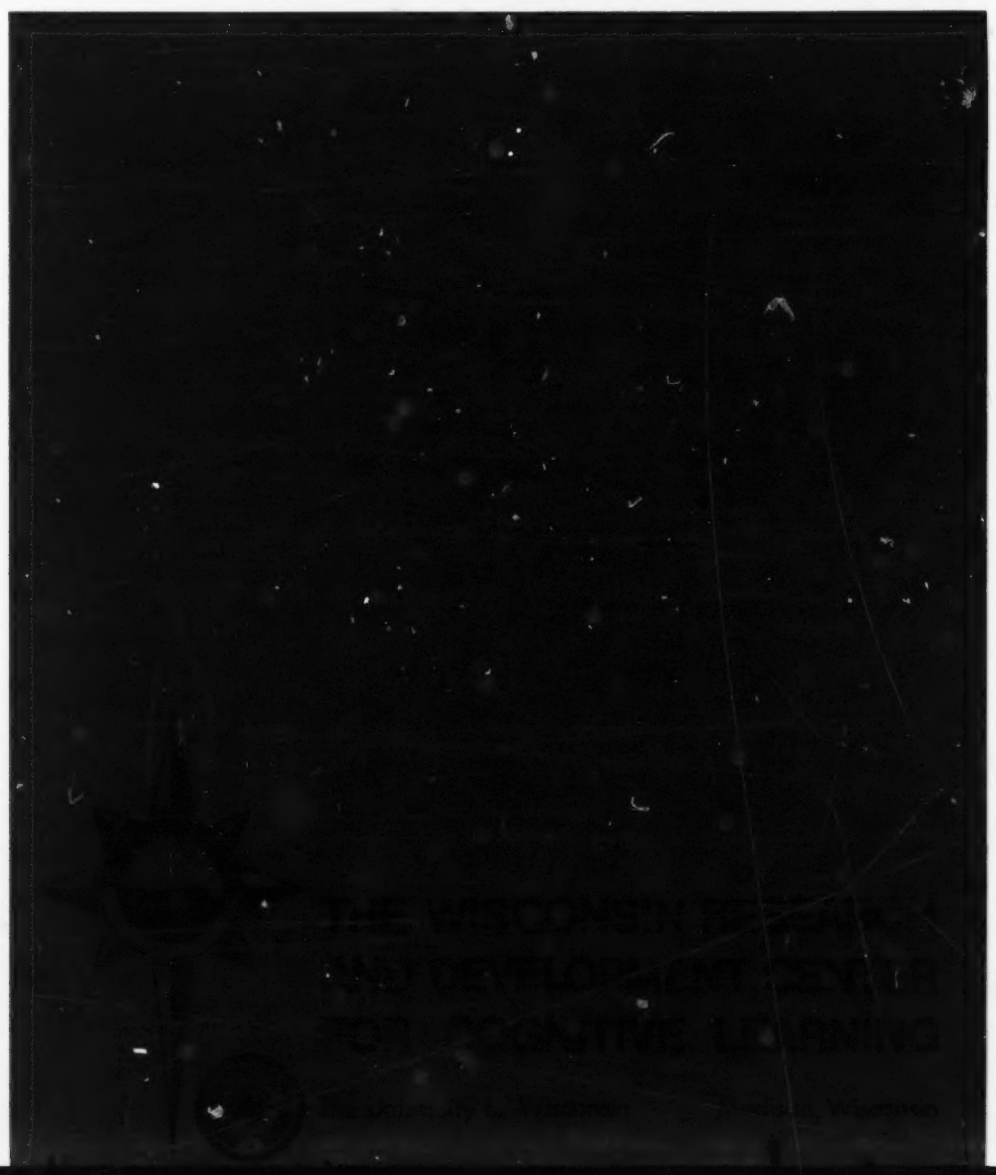
Report from the Project on
Situational Variables and
Efficiency of Concept Learning



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Report from the Project on
Situational Variables and
Efficiency of Concept Learning

by John Powers Gaa

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Wisconsin Research and Developement
Center for Cognitive Learning
The University of Wisconsin
Madison, Wisconsin

September, 1970

This Technical Report is a doctoral dissertation reporting research supported by the Wisconsin Research and Development Center for Cognitive Learning. Since it has been approved by a University Examining Committee, it has not been reviewed by the Center. It is published by the Center as a record of some of the Center's activities and as a service to the student. The bound original is in The University of Wisconsin Memorial Library.

Published by the Wisconsin Research and Development Center for Cognitive Learning, supported in part as a research and development center by funds from the United States Office of Education, Department of Health, Education, and Welfare. The opinions expressed herein do not necessarily reflect the position or policy of the Office of Education and no official endorsement by the Office of Education should be inferred.

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STATEMENT OF FOCUS

The Wisconsin Research and Development Center for Cognitive learning focuses on contributing to a better understanding of cognitive learning by children and youth and to the improvement of related educational practices. The strategy for research and development is comprehensive. It includes basic research to generate new knowledge about the conditions and processes of learning and about the processes of instruction, and the subsequent development of research-based instructional materials, many of which are designed for use by teachers and others for use by students. These materials are tested and refined in school settings. Throughout these operations behavioral scientists, curriculum experts, academic scholars, and school people interact, insuring that the results of Center activities are based soundly on knowledge of subject matter and cognitive learning and that they are applied to the improvement of educational practice.

This Technical Report is from the Situational Variables and Efficiency of Concept Learning Project in Program 1. General objectives of the Program are to generate new knowledge about concept learning and cognitive skills, to synthesize existing knowledge, and to develop educational materials suggested by the prior activities. Contributing to these Program objectives, the Concept Learning Project has the following five objectives: to identify the conditions that facilitate concept learning in the school setting and to describe their management, to develop and validate a schema for evaluating the student's level of concept understanding, to develop and validate a model of cognitive processes in concept learning, to generate knowledge concerning the semantic components of concept learning, and to identify conditions associated with motivation for school learning and to describe their management.

ACKNOWLEDGMENTS

The author wishes to express his appreciation to Dr. Herbert J. Klausmeier who served as his major professor during his doctoral program, and supervised the preparation of this dissertation.

Appreciation is also extended to Dr. Robert E. Davidson and to Dr. Joel R. Levin who provided helpful criticism as members of the reading committee and to Dr. Frank H. Farley and Dr. Semour Spilerman who served on the examining committee.

The author is also indebted to Dr. Dorothy A. Frayer for her comments on the drafts of the proposal and dissertation and to the staff at Wilson Elementary School in Janesville, Wisconsin.

But most importantly the author wishes to thank his wife, Cynthia, not only for typing and editing this manuscript, but for her understanding and patience throughout. It is this understanding which has allowed the attainment of the Ph.D. degree to become a reality.

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ABSTRACT

This study was designed to investigate the effects of individual goal-setting conferences on attitudes toward reading and classes in reading skills, reading skill achievement, and goal-setting behavior.

Two parallel studies were conducted using students in Unit D (corresponding to Third and Fourth Grades) and Unit B (corresponding to First and Second Grades) in a Multi-Unit elementary school. Students in each Unit were placed in the experimental population if they had not previously achieved the reading skill to be studied. Ss were then blocked by sex and previous reading achievement and assigned to one of three treatment groups: individual goal-setting conferences, individual conferences, and control.

The Goal-Setting treatment group received an individual goal-setting conference once a week. They were asked to set goals for the coming week and were given feedback on the accuracy of previous goals and on their achievement in their reading skill class. The Conference treatment group received weekly individual conferences, but did not set goals for the coming week. The Control group did not receive any individual conferences but received the same in-class instruction as the other treatment groups.

Achievement level was assessed using two types of measures. In each Unit the subtest(s) of the Wisconsin Tests of Reading Skill Development (WTRSD) which was appropriate for the reading skill being studied was administered. Ss in each Unit were also given an experimenter-developed test(s) covering the same reading skill.

Three dependent measures were examined in attempting to define the effects of the goal-setting conferences on subsequent goal-setting behavior: number of goals set, absolute difference between number of goals set and number of goals achieved, and the confidence shown in their ability to attain the selected goals.

Two instruments were used in each Unit to measure the effect of the experimental treatment on attitude. The Primary Pupil Reading Attitude Inventory was used to measure attitude toward reading and an attitude scale developed by the experimenter was used to measure attitude toward the reading skills classes.

The results of the study are as follows:

1. The group that participated in the individual goal-setting conferences, in comparison with those who did not, set fewer goals, showed a smaller absolute difference between the number of goals set and number of goals attained, and also indicated less confidence in their ability to achieve the goals they had set.
2. In Unit B, there were significant differences on the WTRSD subtests between the group that participated in the individual goal-setting conferences and those who did not as well as large, but not significant, differences on the experimenter-developed measures. There were no significant differences on achievement measures in Unit D.
3. There were no significant differences between treatment groups on attitude measures in either Unit.

Chapter V

DISCUSSION

In this study the effects of individual goal-setting conferences on classroom attitudes and achievement and on goal-setting behavior have been examined. No attempt has been made to fully evaluate the procedure in terms of time, money, training needed for teachers, etc.; but rather the intent has been to establish that individual goal-setting conferences do affect classroom achievement and to investigate the goal-setting process itself. In order to assess the effects of the goal-setting conferences the dependent measures are considered separately.

Attitude Measures

In neither Unit D nor Unit B was there a difference in attitude as a function of treatment. No significant differences were found between the goal-setting and non-goal-setting groups or between the conference and control groups. Because the duration of the study was only three weeks, the failure to find differences in attitude toward reading in general is not surprising; the likelihood of changing long-standing attitudes in this period of time is small. There was also no difference between treatment groups in their attitudes toward the reading skills class. On an intuitive level, one would expect the goal-setting group to have a more positive attitude toward the class due to generally higher achievement and more individual attention.

As Bayfield and Crockett (1955) and Locke (1965) have pointed out, however, attitude and performance are not necessarily correlated. Perhaps the only possible explanation which can be proposed to explain the lack of differences in attitude toward the reading skills class is to point out that the average attitude score for all students was extremely high, thereby effectively producing a ceiling effect and eliminating any chance of discriminating among groups.

Achievement Measures

In the case of both the experimenter-developed and the criterion-referenced achievement tests an increase in the effectiveness of the goal-setting procedure was noted for the second Unit tested, Unit B. After examining the results of Unit D it had been decided to place more emphasis on providing feedback relating to the ability to handle the specific reading skills. With the change in emphasis, goal-setting students in Unit B showed significantly higher achievement on the criterion-referenced achievement tests and, although the differences were not statistically significant, attained a higher level of achievement on the experimenter-developed tests as well. In neither Unit were there any differences between the conference and control groups. This finding is of extreme importance because it indicates that the higher achievement of the goal-setting group can be attributed to the goal-setting procedures *per se* rather than to a general "conference effect."

Technical characteristics of the Experimenter-Developed tests are presented in Appendix K.

Goal-Setting Behavior

There can be little question of the effect of the goal-setting pro-

In both Unit D and Unit B behavior of the goal-setting group differed at the .01 level of significance from that displayed by the conference and control groups. No differences were found in the conference versus control comparisons. Again, the differential effect found in the goal-setting versus non-goal-setting comparisons must be attributed to the goal-setting procedures employed rather than to a general "conference effect."

In both Units, the goal-setting group set fewer goals than the other groups. As discussed previously, this is interpreted as representing a more realistic statement of goals. This type of interpretation is supported by the fact that the goal-setting groups showed smaller differences between the number of goals set and the number of goals attained. In other words, the goals were more accurate and more realistic. This seems to support the findings of Porat and Haas (1969) that more information (feedback in this case) results in more accurate levels of goal setting and decision making.

The consistency of goal-setting behavior between Units is also apparent in the confidence levels displayed by the treatment groups. In both Units, the goal-setting group had lower confidence scores than did the non-goal-setting groups. The "lower scores" are again interpreted as reflecting more realistic appraisals by the students of their chances for success. It would seem that a greater percentage of goal-setting students realize that they would probably require help in learning and mastering the reading skills and that they might not be able to achieve all of the goals which they had set.

With respect to the experimental questions which the study sought to answer, the following conclusions may be drawn:

A. With respect to attitude:

1. There were no significant differences between goal-setting and non-goal-setting treatment groups.
2. There were no significant differences between the conference and control groups.
3. There were no significant differences as a function of either sex or ability level.

B. With respect to achievement:

1. There were significant differences between goal-setting and non-goal-setting treatment groups on criterion-referenced achievement tests and non-significant differences on the experimenter-developed tests in Unit B. The goal-setting group showed a higher level of performance than the other treatment groups in Unit B following a change in emphasis in the conference procedure used in Unit D to allow more feedback concerning attainment of skills.
2. There were no significant differences between the conference and control groups in either Unit. This indicates that experimental differences between the goal-setting and non-goal-setting groups may be attributed to the goal-setting procedures.
3. There were significant differences on all achievement measures as a function of the level of previous achievement. In each case the test scores increased as the level of previous achievement increased.
4. There were no significant differences as a function of sex.

C. With respect to goal-setting behavior:

1. The goal-setting group differed significantly in goal-setting behavior from the non-goal-setting groups. They set fewer goals, had a smaller difference between the number of goals set and the number of goals attained, and showed lower confidence in their ability to attain the goals they had set.
2. There were no significant differences between the conference and control groups. This indicates that experimental differences between the goal-setting and non-goal-setting groups may be attributed to the goal-setting procedures.
3. There were no significant differences as a function of sex or level of previous achievement.

With respect to the expected relationships stated in Chapter III, the following conclusions may be drawn:

Attitude

1. The expected difference in attitude toward reading and the reading skill class was not found. There were no significant differences between goal-setting and non-goal-setting or between conference and control groups in either Unit.

Achievement

1. The expected difference in achievement was found in Unit B. The goal-setting treatment group attained higher achievement levels on both the experimenter-developed and criterion-referenced achievement tests in Unit B. The differences on the criterion-referenced tests were significant at the .05 level.

2. No significant differences in achievement were found between the conference and control groups in either Unit.

Goal-Setting Behavior

1. The goal-setting and non-goal-setting treatment groups differed significantly in their goal-setting behavior.
2. No significant differences in goal-setting behavior were found between the conference and control groups in either Unit.

The present study demonstrated that the use of an individual goal-setting conference can improve the classroom achievement of students and investigated the effects of the procedure on goal-setting behavior.

Clearly, the significant differences found between treatment groups in relation to their goal-setting behavior are attributable to the effect of the goal-setting conferences, since conferences by themselves (without goal-setting) showed no effect on goal-setting relative to the control. In neither Unit were there differences as a function of sex, previous achievement level, or sex by previous achievement level; the only differences were as a function of treatment. Goal-setting Ss on the average set fewer goals, had a smaller absolute difference between number of goals set and number of goals achieved, and had a lower confidence score in their ability to achieve the goals they had set. This last finding can be partially explained by the fact that non-goal-setting Ss tended to show extremely high confidence in their ability to attain their goals.

The findings regarding the effect of individual goal-setting conferences on achievement are less clear cut. In the first Unit studied (Unit D) no significant differences were found, while in the second Unit (Unit B), significant differences did appear. The fact that

students received more feedback in relation to skill attainment in Unit B conferences may explain this difference.[1] If this is the case, implementation of the procedure with classroom teachers giving the conferences should produce larger differences in that more accurate feedback could then be provided. Another factor which might help increase the goal-setting conference effect would be daily teacher reminders in class to concentrate on the goals set for the week. This was not done in this study because Ss from all treatment conditions were present in each classroom in an attempt to minimize teacher bias. It would seem that in normal classroom use that these considerations would probably combine to increase the effects found in the present study. This is an empirical question however, which should be studied before final recommendations are given regarding the goal-setting procedures.

In this study the effects of the goal-setting process on achievement, attitudes, and goal-setting behavior were examined, but no attempt was made to fully evaluate the procedure. Besides the possible teacher influences mentioned above, factors such as cost, feasibility, inservice training needed and time must be investigated.

In future studies the target population should also be varied. As Katz (1967) has pointed out, age, socio-economic status, and race affect the ability to effectively use performance feedback. Because feedback is an important part of the individual goal-setting process, these variables should be systematically investigated.

---

[1]However, other factors such as age, Unit level, skill studied, etc. might also be considered in accounting for the differences in Unit B. Since all of these factors were unavoidably confounded in the present study, this change cannot be attributed to a single variable.

The significance of this study lies in the establishment of goal-setting procedures which affect ongoing classroom achievement and in the more precise delineation of the attributes of goal-setting per se. The attributes of goal-setting which have been studied will contribute to the general knowledge of goal-setting in both school and non-school situations. The goal-setting procedures must now be more fully evaluated in everyday classroom use, but tentatively provide the teacher with an important motivational technique to improve student achievement.

Appendix A

STUDENT GOAL-SETTING CHECK LISTS FOR UNITS D AND B

Student Goal-Setting Check List
Unit D

Goal-Setting

Name:

Date:

WHICH OF THESE WILL YOU BE ABLE TO DO BY THE END OF THIS WEEK?

Synonym Goal Check List

- ☐ I know what the word synonym means.

- ☐ If I am given two words, once in a while I can tell if they have the same or different meanings.

- ☐ If I am given two words, most of the time I can tell if they have the same or different meanings.

- ☐ If I am given two words, I can almost always tell if they have the same or different meanings.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from the words in a sentence.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from the words in a sentence.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from the words in a sentence.

- ▭ If I am given a word in a sentence, once in a while I can pick out a word which means the same thing from a list of words.
- ▭ If I am given a word in a sentence, most of the time I can pick out a word which means the same thing from a list of words.
- ▭ If I am given a word in a sentence, I can almost always pick out a word which means the same thing from a list of words.

- ▭ If my teacher tells me a word, once in a while I can tell her a word which means the same thing.
- ▭ If my teacher tells me a word, most of the time I can tell her a word which means the same thing.
- ▭ If my teacher tells me a word, I can almost always tell her a word which means the same thing.

- ▭ If I am given a word in a sentence, once in a while I can use a word which means the same thing in the sentence.
- ▭ If I am given a word in a sentence, most of the time I can use a word which means the same thing in the sentence.
- ▭ If I am given a word in a sentence, I can almost always use a word which means the same thing in the sentence.

- ▭ If I am given a word, once in a while I can use a word which means the same thing in a sentence.
- ▭ If I am given a word, most of the time I can use a word which means the same thing in a sentence.
- ▭ If I am given a word, I can almost always use a word which means the same thing in a sentence.

- ▭ If there is a sentence I don't know, once in a while I can use synonyms to understand the sentence.
- ▭ If there is a sentence I don't know, most of the time I can use synonyms to understand the sentence.
- ▭ If there is a sentence I don't know, I can almost always use synonyms to understand the sentence.

Antonym Goal Check List

- ☐ I know what the word antonym means.

- ☐ If I am given two words, once in a while I can tell if they mean opposite things.

- ☐ If I am given two words, most of the time I can tell if they mean opposite things.

- ☐ If I am given two words, I can almost always tell if they mean opposite things.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from the words in a sentence.

- ☐ If I am given a word in a sentence, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, I can almost always pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, once in a while I can tell her a word which means the opposite.
- ☐ If my teacher tells me a word, most of the time I can tell her a word which means the opposite.
- ☐ If my teacher tells me a word, I can almost always tell her a word which means the opposite.

- ☐ If I am given a word, once in a while I can use a word which means the opposite in a sentence.
- ☐ If I am given a word, most of the time I can use a word which means the opposite in a sentence.
- ☐ If I am given a word, I can almost always use a word which means the opposite in a sentence.

Compound Words Goal Check List

Unit B

Name:

Date:

WHICH OF THESE ARE YOU GOING TO TRY TO DO BY THE END OF THIS WEEK?

- ☐ I will know what a compound word is.

- ☐ If I am given a compound word, once in a while I will be able to tell what words make it up.

- ☐ If I am given a compound word, most of the time I will be able to tell what words make it up.

- ☐ If I am given a compound word, I will almost always be able to tell what words make it up.

- ☐ If I am given a list of words, once in a while I will be able to tell which ones are compound words.

- ☐ If I am given a list of words, most of the time I will be able to tell which ones are compound words.

- ☐ If I am given a list of words, I will almost always be able to tell which ones are compound words.

- ☐ If I am given two words, once in a while I will be able to tell if they can be made into a compound word.

- ☐ If I am given two words, most of the time I will be able to tell if they can be made into a compound word.

- ☐ If I am given two words, I will almost always be able to tell if they can be made into a compound word.

- ☐ If I am given two words which can be made into a compound word, once in a while I will be able to combine them in the right way.

- ☐ If I am given two words which can be made into a compound word, most of the time I will be able to combine them in the right way.

- ☐ If I am given two words which can be made into a compound word, I will almost always be able to combine them in the right way.

- ☐ If I am asked to, once in a while I will be able to give an example of a compound word.
- ☐ If I am asked to, most of the time I will be able to give an example of a compound word.
- ☐ If I am asked to, I will almost always be able to give an example of a compound word.

Base Words and Endings Goal Check List

- ☐ I will know what a base word is.
- ☐ I will know what an ending is.
- ☐ If I am given a word, once in a while I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, most of the time I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, I will almost always be able to tell what the base is and what the ending is.
- ☐ If I am given a list of words, once in a while I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, most of the time I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, I will almost always be able to tell which are base words with endings.
- ☐ If I am given a base word, once in a while I will be able to give an ending for it.
- ☐ If I am given a base word, most of the time I will be able to give an ending for it.
- ☐ If I am given a base word, I will almost always be able to give an ending for it.

- ☐ If I am given a sentence with a word missing, once in a while I will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, most of the timeI will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, I will almost always be able to know whether to put in a base word or a base word with an ending.
- ☐ If I am given a base word and an ending, once in a while I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending,most of the time I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending, I will almost always be able to use them in a sentence.
- ☐ I will know what these endings mean and how they change the meaning of base words:

☐	ed	☐	y
☐	s	☐	est
☐	er	☐	tion
☐	ing	☐	sion
☐	ly	☐	full

Appendix B

GOAL REMINDER SHEETS FOR UNITS D AND B

Goal Reminder Sheet

for Student-Set Goals

Unit D

Student's Name:

Date:

THESE ARE THE GOALS YOU HAVE CHECKED FOR THIS WEEK. YOU SHOULD TRY TO LEARN TO DO THESE BY FRIDAY.

Synonym Goal Check List

- ☐ I know what the word synonym means.
- ☐ If I am given two words, once in a while I can tell if they have the same or different meanings.
- ☐ If I am given two words, most of the time I can tell if they have the same or different meanings.
- ☐ If I am given two words, I can almost always tell if they have the same or different meanings.
- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from a list of words.
- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from a list of words.
- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from a list of words.
- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from the words in a sentence.
- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from the words in a sentence.
- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from the words in a sentence.

- [ ] If I am given a word in a sentence, once in a while I can pick out a word which means the same thing from a list of words.
- [ ] If I am given a word in a sentence, most of the time I can pick out a word which means the same thing from a list of words.
- [ ] If I am given a word in a sentence, I can almost always pick out a word which means the same thing from a list of words.
- [ ] If my teacher tells me a word, once in a while I can tell her a word which means the same thing.
- [ ] If my teacher tells me a word, most of the time I can tell her a word which means the same thing.
- [ ] If my teacher tells me a word, I can almost always tell her a word which means the same thing.
- [ ] If I am given a word in a sentence, once in a while I can use a word which means the same thing in the sentence.
- [ ] If I am given a word in a sentence, most of the time I can use a word which means the same thing in the sentence.
- [ ] If I am given a word in a sentence, I can almost always use a word which means the same thing in the sentence.
- [ ] If I am given a word, once in a while I can use a word which means the same thing in a sentence.
- [ ] If I am given a word, most of the time I can use a word which means the same thing in a sentence.
- [ ] If I am given a word, I can almost always use a word which means the same thing in a sentence.
- [ ] If there is a sentence I don't know, once in a while I can use synonyms to understand the sentence.
- [ ] If there is a sentence I don't know, most of the time I can use synonyms to understand the sentence.
- [ ] If there is a sentence I don't know, I can almost always use synonyms to understand the sentence.

Antonym Goal Check List

- ☐ I know what the word antonym means.

- ☐ If I am given two words, once in a while I can tell if they mean opposite things.

- ☐ If I am given two words, most of the time I can tell if they mean opposite things.

- ☐ If I am given two words, I can almost always tell if they mean opposite things.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from the words in a sentence.

- ☐ If I am given a word in a sentence, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, I can almost always pick out a word which means the opposite from a list of words.

- [ ] If my teacher tells me a word, once in a while I can tell her a word which means the opposite.

- [ ] If my teacher tells me a word, most of the time I can tell her a word which means the opposite.

- [ ] If my teacher tells me a word, I can almost always tell her a word which means the opposite.

- [ ] If I am given a word, once in a while I can use a word which means the opposite in a sentence.

- [ ] If I am given a word, most of the time I can use a word which means the opposite in a sentence.

- [ ] If I am given a word, I can almost always use a word which means the opposite in a sentence.

Goal Reminder Sheet
for Student-Set Goals
Unit B

Name:

Date:

THESE ARE THE GOALS YOU HAVE CHECKED FOR THIS WEEK. YOU SHOULD TRY TO LEARN TO DO THESE BY THE END OF THE WEEK.

☐ I will know what a compound word is.

☐ If I am given a compound word, once in a while I will be able to tell what words make it up.

☐ If I am given a compound word, most of the time I will be able to tell what words make it up.

☐ If I am given a compound word, I will almost always be able to tell what words make it up.

☐ If I am given a list of words, once in a while I will be able to tell which ones are compound words.

☐ If I am given a list of words, most of the time I will be able to tell which ones are compound words.

☐ If I am given a list of words, I will almost always be able to tell which ones are compound words.

☐ If I am given two words, once in a while I will be able to tell if they can be made into a compound word.

☐ If I am given two words, most of the time I will be able to tell if they can be made into a compound word.

☐ If I am given two words, I will almost always be able to tell if they can be made into a compound word.

☐ If I am given two words which can be made into a compound word, once in a while I will be able to combine them in the right way.

☐ If I am given two words which can be made into a compound word, most of the time I will be able to combine them in the right way.

☐ If I am given two words which can be made into a compound word, I will almost always be able to combine them in the right way.

- ☐ If I am asked to, once in a while I will be able to give an example of a compound word.
- ☐ If I am asked to, most of the time I will be able to give an example of a compound word.
- ☐ If I am asked to, I will almost always be able to give an example of a compound word.

Base Words and Endings Goal Check List

- ☐ I will know what a base word is.
- ☐ I will know what an ending is.
- ☐ If I am given a word, once in a while I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, most of the time I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, I will almost always be able to tell what the base is and what the ending is.
- ☐ If I am given a list of words, once in a while I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, most of the time I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, I will almost always be able to tell which are base words with endings.
- ☐ If I am given a base word, once in a while I will be able to give an ending for it.
- ☐ If I am given a base word, most of the time I will be able to give an ending for it.
- ☐ If I am given a base word, I will almost always be able to give an ending for it.

- ☐ If I am given a sentence with a word missing, once in a while I will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, most of the timeI will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, I will almost always be able to know whether to put in a base word or a base word with an ending.

- ☐ If I am given a base word and an ending, once in a while I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending,most of the time I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending, I will almost always be able to use them in a sentence.

- ☐ I will know what these endings mean and how they change the meaning of base words:

☐	ed	☐	y
☐	s	☐	est
☐	er	☐	tion
☐	ing	☐	sion
☐	ly	☐	full

Appendix C

CHECK LISTS FOR TEACHER EVALUATION OF GOALS ATTAINED FOR UNITS D AND B

Check List for

Teacher Evaluation of Goals Attained
Unit D

Teacher Evaluation

Student's Name:

Date:

WHICH OF THESE HAS THE STUDENT BEEN ABLE TO ACCOMPLISH DURING THE PAST WEEK?

Synonym Goal Check List

- ☐ I know what the word synonym means.

- ☐ If I am given two words, once in a while I can tell if they have the same or different meanings.

- ☐ If I am given two words, most of the time I can tell if they have the same or different meanings.

- ☐ If I am given two words, I can almost always tell if they have the same or different meanings.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from a list of words.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the same thing from the words in a sentence.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the same thing from the words in a sentence.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the same thing from the words in a sentence.

- [ ] If I am given a word in a sentence, once in a while I can pick out a word which means the same thing from a list of words.
- [ ] If I am given a word in a sentence, most of the time I can pick out a word which means the same thing from a list of words.
- [ ] If I am given a word in a sentence, I can almost always pick out a word which means the same thing from a list of words.

- [ ] If my teacher tells me a word, once in a while I can tell her a word which means the same thing.
- [ ] If my teacher tells me a word, most of the time I can tell her a word which means the same thing.
- [ ] If my teacher tells me a word, I can almost always tell her a word which means the same thing.

- [ ] If I am given a word in a sentence, once in a while I can use a word which means the same thing in the sentence.
- [ ] If I am given a word in a sentence, most of the time I can use a word which means the same thing in the sentence.
- [ ] If I am given a word in a sentence, I can almost always use a word which means the same thing in the sentence.

- [ ] If I am given a word, once in a while I can use a word which means the same thing in a sentence.
- [ ] If I am given a word, most of the time I can use a word which means the same thing in a sentence.
- [ ] If I am given a word, I can almost always use a word which means the same thing in a sentence.

- [ ] If there is a sentence I don't know, once in a while I can use synonyms to understand the sentence.
- [ ] If there is a sentence I don't know, most of the time I can use synonyms to understand the sentence.
- [ ] If there is a sentence I don't know, I can almost always use synonyms to understand the sentence.

Antonym Goal Check List

- ☐ I know what the word antonym means.

- ☐ If I am given two words, once in a while I can tell if they mean opposite things.

- ☐ If I am given two words, most of the time I can tell if they mean opposite things.

- ☐ If I am given two words, I can almost always tell if they mean opposite things.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from a list of words.

- ☐ If my teacher tells me a word, once in a while I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, most of the time I can pick out a word which means the opposite from the words in a sentence.

- ☐ If my teacher tells me a word, I can almost always pick out a word which means the opposite from the words in a sentence.

- ☐ If I am given a word in a sentence, once in a while I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, most of the time I can pick out a word which means the opposite from a list of words.

- ☐ If I am given a word in a sentence, I can almost always pick out a word which means the opposite from a list of words.

- [ ] If my teacher tells me a word, once in a while I can tell her a word which means the opposite.

- [ ] If my teacher tells me a word, most of the time I can tell her a word which means the opposite.

- [ ] If my teacher tells me a word, I can almost always tell her a word which means the opposite.

- [ ] If I am given a word, once in a while I can use a word which means the opposite in a sentence.

- [ ] If I am given a word, most of the time I can use a word which means the opposite in a sentence.

- [ ] If I am given a word, I can almost always use a word which means the opposite in a sentence.

Check List for

Teacher Evaluation of Goals Attained

Unit B

Student's Name:

Date:

WHICH OF THESE HAS THE STUDENT BEEN ABLE TO ACCOMPLISH DURING THE PAST WEEK?

- ☐ I will know what a compound word is.

- ☐ If I am given a compound word, once in a while I will be able to tell what words make it up.

- ☐ If I am given a compound word, most of the time I will be able to tell what words make it up.

- ☐ If I am given a compound word, I will almost always be able to tell what words make it up.

- ☐ If I am given a list of words, once in a while I will be able to tell which ones are compound words.

- ☐ If I am given a list of words, most of the time I will be able to tell which ones are compound words.

- ☐ If I am given a list of words, I will almost always be able to tell which ones are compound words.

- ☐ If I am given two words, once in a while I will be able to tell if they can be made into a compound word.

- ☐ If I am given two words, most of the time I will be able to tell if they can be made into a compound word.

- ☐ If I am given two words, I will almost always be able to tell if they can be made into a compound word.

- ☐ If I am given two words which can be made into a compound word, once in a while I will be able to combine them in the right way.

- ☐ If I am given two words which can be made into a compound word, most of the time I will be able to combine them in the right way.

- ☐ If I am given two words which can be made into a compound word, I will almost always be able to combine them in the right way.

- ☐ If I am asked to, once in a while I will be able to give an example of a compound word.
- ☐ If I am asked to, most of the time I will be able to give an example of a compound word.
- ☐ If I am asked to, I will almost always be able to give an example of a compound word.

Base Words and Endings Goal Check List

- ☐ I will know what a base word is.
- ☐ I will know what an ending is.
- ☐ If I am given a word, once in a while I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, most of the time I will be able to tell what the base is and what the ending is.
- ☐ If I am given a word, I will almost always be able to tell what the base is and what the ending is.
- ☐ If I am given a list of words, once in a while I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, most of the time I will be able to tell which are base words with endings.
- ☐ If I am given a list of words, I will almost always be able to tell which are base words with endings.
- ☐ If I am given a base word, once in a while I will be able to give an ending for it.
- ☐ If I am given a base word, most of the time I will be able to give an ending for it.
- ☐ If I am given a base word, I will almost always be able to give an ending for it.

- ☐ If I am given a sentence with a word missing, once in a while I will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, most of the timeI will know whether to put in a base word or a base word with an ending.
- ☐ If I am given a sentence with a word missing, I will almost always be able to know whether to put in a base word or a base word with an ending.
- ☐ If I am given a base word and an ending, once in a while I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending,most of the time I will be able to use them in a sentence.
- ☐ If I am given a base word and an ending, I will almost always be able to use them in a sentence.

- ☐ I will know what these endings mean and how they change the meaning of base words:

☐	ed	☐	y
☐	s	☐	est
☐	er	☐	tion
☐	ing	☐	sion
☐	ly	☐	full

Appendix D

GOAL-SETTING CONFIDENCE RATING SCALE USED FOR BOTH UNITS D AND B

Goal-Setting Confidence Rating Scale

Units D and B

Name:

Date:

THINK ABOUT THE GOALS YOU HAVE CHECKED FOR THIS COMING WEEK AND ANSWER THESE QUESTIONS.

1. How certain are you that you will reach the goals you have set?

- ☐ I am very sure I will.
- ☐ I am pretty sure I will.
- ☐ I think I will.
- ☐ I don't know if I will.
- ☐ I don't think I will

2. How well will you learn the skills?

- ☐ I will be able to do them without help.
- ☐ I will be able to do them with some help.
- ☐ I will be able to do them only if someone helps me.
- ☐ I don't know.
- ☐ I won't be able to do them.

Appendix E

SUBTESTS OF THE WISCONSIN TESTS OF READING
SKILL DEVELOPMENT USED IN UNITS D AND B

Name

_____

1. C. 4.b.

Test 16 - Revised
Synonyms and antonyms
Unit D

EXAMPLE	day -- night	A. same ▭ B. opposite ▭ C. different ▭		day -- morning	A. same ▭ B. opposite ▭ C. different ▭		
1.	close -- open	A. same ▭ B. opposite ▭ C. different ▭		9. rush -- hurry	A. same ▭ B. opposite ▭ C. different ▭		
2.	close -- shut	A. same ▭ B. opposite ▭ C. different ▭		10. rush -- begin	A. same ▭ B. opposite ▭ C. different ▭		
3.	black -- white	A. same ▭ B. opposite ▭ C. different ▭		11. over -- under	A. same ▭ B. opposite ▭ C. different ▭		
4.	black -- gray	A. same ▭ B. opposite ▭ C. different ▭		12. over -- above	A. same ▭ B. opposite ▭ C. different ▭		
5.	hot -- cold	A. same ▭ B. opposite ▭ C. different ▭		13. all -- none	A. same ▭ B. opposite ▭ C. different ▭		
6.	hot -- warm	A. same ▭ B. opposite ▭ C. different ▭		14. all -- some	A. same ▭ B. opposite ▭ C. different ▭		
7.	quit -- start	A. same ▭ B. opposite ▭ C. different ▭		15. fast -- quick	A. same ▭ B. opposite ▭ C. different ▭		
8.	quit -- stop	A. same ▭ B. opposite ▭ C. different ▭		16. fast -- slow	A. same ▭ B. opposite ▭ C. different ▭		

I. B 4.a.

Test 9
Compound words
Unit B

EXAMPLE	A. looking	⬭
	B. downtown	⬭
	C. funny	⬭

1. A. elephant ⬭
   B. always ⬭
   C. bedroom ⬭

2. A. yellow ⬭
   B. package ⬭
   C. somebody ⬭

3. A. birthday ⬭
   B. present ⬭
   C. monkey ⬭

4. A. farmer ⬭
   B. happened ⬭
   C. barnyard ⬭

5. A. inside ⬭
   B. yellow ⬭
   C. rabbit ⬭

6. A. herself ⬭
   B. painting ⬭
   C. tomorrow ⬭

7. A. also ⬭
   B. into ⬭
   C. building ⬭

8. A. followed ⬭
   B. swimming ⬭
   C. goldfish ⬭

9. A. picnic ⬭
   B. again ⬭
   C. policeman ⬭

10. A. around ⬭
    B. anything ⬭
    C. engine ⬭

11. A. balloon ⬭
    B. cardboard ⬭
    C. feather ⬭

12. A. yourself ⬭
    B. bottom ⬭
    C. woman ⬭

13. A. window ⬭
    B. umbrella ⬭
    C. outside ⬭

14. A. between ⬭
    B. bathing ⬭
    C. bathroom ⬭

1. B. 4.a.

Test 9
page 2

15. A. summer ▭
B. sunshine ▭
C. surprise ▭

16. A. backstop ▭
B. vegetable ▭
C. beautiful ▭

17. A. bandage ▭
B. beginning ▭
C. blindfold ▭

1. B 4.c.

Unit B
Test 11 - Revised
Base words and endings

Name _____

EXAMPLE

stronger
- ▭ A. stron ger
- ▭ B. stronge r
- ▭ C. strong er

1. playing
   - ▭ A. play ing
   - ▭ B. play ing
   - ▭ C. p lay ing

2. walked
   - ▭ A. walked
   - ▭ B. wal ked
   - ▭ C. walk ed

3. jumps
   - ▭ A. jum ps
   - ▭ B. jump s
   - ▭ C. jum ps

4. running
   - ▭ A. ru nning
   - ▭ B. run ning
   - ▭ C. run ning

5. kitten's
   - ▭ A. kitten's
   - ▭ B. kitten's
   - ▭ C. kitten's

6. catches
   - ▭ A. cat ches
   - ▭ B. catch es
   - ▭ C. catch es

7. hitting
   - ▭ A. hit ting
   - ▭ B. hi tting
   - ▭ C. hitt ing

8. boys
   - ▭ A. boys
   - ▭ B. boy s
   - ▭ C. boy s

9. going
   - ▭ A. go ing
   - ▭ B. goin g
   - ▭ C. go ing

10. pulled
    - ▭ A. pulle d
    - ▭ B. pul led
    - ▭ C. pull ed

11. dog's
    - ▭ A. dog's
    - ▭ B. dog's
    - ▭ C. dog's

12. smaller
    - ▭ A. small er
    - ▭ B. sma ller
    - ▭ C. smal ler

I. C 3.a.

Test 13 - Revised
Base words
Unit B

Name _____

EXAMPLE	
Susan was _____ and spilled her milk.	A. careless ▭ B. careful ▭ C. cared ▭

1. Bill _____ took his dog for a walk.	A. gladly ▭ B. gladder ▭ C. gladful ▭
2. Tom had to _____ his shoe to take it off.	A. ties ▭ B. untie ▭ C. retie ▭
3. Sally was so _____ that she went to bed early.	A. sleepy ▭ B. sleepless ▭ C. sleeper ▭
4. The kite climbed _____ into the air.	A. quick ▭ B. quickly ▭ C. quickness ▭
5. The cup with a hole in the bottom was _____.	A. uses ▭ B. useless ▭ C. useful ▭
6. The sun shines _____.	A. brightless ▭ B. brightness ▭ C. brightly ▭
7. The fight was _____ because Joe was much bigger than Bill.	A. fairness ▭ B. unfair ▭ C. fairly ▭
8. There was _____ because the team lost.	A. sadness ▭ B. sadder ▭ C. sad ▭
9. Tom was very _____ to his little brother.	A. kinder ▭ B. kind ▭ C. kindness ▭
10. Brian was _____ because he lost his dog.	A. happiness ▭ B. happily ▭ C. unhappy ▭
11. Jack had to _____ his bed after the dog tore it up.	A. unmake ▭ B. maker ▭ C. remake ▭

I. C 3.a.

Test 13
page 2

12. The water gun was empty so Steve had to _____ it.

A. refill ☐
B. filled ☐
C. unfill ☐

13. No one could see the cat in the _____ of the cave.

A. darker ☐
B. undark ☐
C. darkness ☐

14. Mary saved Sue's life. Sue is _____.

A. thankful ☐
B. thankness ☐
C. thank ☐

15. Jo wanted to _____ her cat in doll clothes.

A. undress ☐
B. dress ☐
C. dresser ☐

Appendix F

EXPERIMENTER-DEVELOPED TESTS FOR UNITS D AND B

TEST T FOR USAGE OF SYNONYMS AND ANTONYMS

Unit D

Name:

Date:

1. Synonyms are words which

   a. are spelled alike.

   b. mean the opposite.

   c. mean the same.

2. Antonyms are words which

   a. are spelled alike.

   b. mean the opposite.

   c. mean the same.

3. Do these words mean opposite things?

a. glass, wood	b. side, corner	c. win, lose
yes	yes	yes
no	no	no

4. Do these words have the same or different meanings?

a. row, push	b. tree, elm	c. run, trot
same	same	same
different	different	different

5. Draw a line from each word in the first list to the word in the second list which means the opposite.

Over	Fall
Rise	Small
Tall	Pants
Dress	Under
Fill	Spill

6. Draw a line from each word in the first list to the word in the second list which means the same thing.

Band	Youngster
Child	Leap
Finish	Orchestra
Jump	Couch
Sofa	Complete

7. Underline the word in the following sentence which means the same thing as <u>coat</u>.

   The boy ran out of the house without his jacket and cap.

8. Underline the word in the following sentence which means the opposite of <u>exciting</u>.

   Only once during the dull evening did something interesting and fun happen.

9. Underline the word in the following sentence which means the opposite of <u>good</u>.

   The mischievous boy broke the window and ran away.

10. Underline the word in the following sentence which means the same thing as <u>hat</u>.

    The boy ran out of the house without his jacket and cap.

11. Check the word in the list below which means the same thing as the underlined word:

    In spring the weather is warm and the grass green and <u>beautiful</u>.

    a. bountiful

    b. long

    c. pretty

    d. growing

12. Check the word in the list below which means the opposite of the underlined word.

In the winter the snow is often deep and cold days are <u>frequent</u>.

a. few

b. many

c. often

d. frigid

13. Beside each of the words below, write a word that means the same thing.

a. Glove _____

b. Run _____

c. Talk _____

d. Father _____

e. Automobile _____

14. Beside each of the words below, write a word which means the opposite.

a. Ceiling _____

b. Empty _____

c. Wet _____

d. Bright _____

e. Right _____

15. Write a sentence using a word which means the opposite of <u>large</u>.

16. Write a sentence using a word which means the same thing as <u>America</u>.

17. Write a sentence using a word which means the same thing as <u>cover</u>.

18. Write a sentence using a word which means the opposite of <u>smooth</u>.

Base Words and Endings

Unit B

Name:

Date:

1. Put an X in the box next to each word which is made up of a base word and an ending. Leave the other boxes blank.

Exanple: ☒ Walking

☐ Doghouse

☒ Talked

☐ Barefoot	☐ Turnkey	☐ Doing
☐ Sleeps	☐ Played	☐ Jumps
☐ Reads	☐ Lives	☐ Satisfy
☐ Someone	☐ Raindrop	☐ Calling

2. This is a list of base words with endings. Draw a line between the base and the ending.

Example: Walk|ing

Talk|ed

Bumpy	Gladly
Warped	Jumped
Player	Pushing
Helps	Beating
Seeing	Pulled
Softly	Lucky

3. This is a list of base words. Write an ending to each and write the new word you get by adding the ending to the base word.

Example:	Walk	ing	Walking
	Talk	ed	Talked
Act	_____	_____	
Stay	_____	_____	
Say	_____	_____	
Call	_____	_____	
Do	_____	_____	
Catch	_____	_____	
Beat	_____	_____	
Rust	_____	_____	
Fly	_____	_____	
Grow	_____	_____	
Show	_____	_____	
Go	_____	_____	

4. Put a C next to each compound word, a B next to each word which is a base word and ending and an X next to each word which is neither.

Example: B Leaping
X Push
C someone

__ Into	__ Book	__ Going
__ Everybody	__ Sews	__ Buttercup
__ Push	__ Seeing	__ Research
__ Falls	__ Pushrod	__ Feeling

COMPOUND WORDS - Unit B

NAME:

DATE:

1. This is a test of compound words. Draw a line between the two words in each compound word.

Example: snow|ball

barn|yard

foot|ball

backbone	manhole	breakfast
sunshine	milkweed	cupboard
beanstalk	stepsister	nowhere
bearskin	countryside	mainsail

2. Put an X in the box next to each compound word. Leave the other boxes blank.

Example: ☒ starfish

☐ fishing

☒ doghouse

☐ spaceman	☐ walking	☐ bobcat
☐ countdown	☐ baggage	☐ mischief
☐ bakery	☐ sunrise	☐ hailstone
☐ blueberry	☐ ballroom	☐ forehead

3. Put an X in the box next to the words which can make a compound word.

Example: ☒ cow boy (cowboy)

☐ boy girl

☒ cut hair (haircut)

☒ town down (downtown)

☐ clothes bed

☐ cup cookie

☐ knife fork

☐ chair man

☐ way half

☐ book store

☐ house ship

☐ shoe foot

☐ fruit grape

☐ pile snow

☐ stander by

☐ along side

4. Each pair of words can be made into a compound word. Write the compound word on the line after each pair.

Example: house bird birdhouse

play ground playground

pipe bag _____

any body _____

by stand _____

skirt hoop _____

hand shake _____

noon after _____

set sun _____

high way _____

Appendix G

READING SKILLS ATTITUDE QUESTIONNAIRES USED IN UNITS D AND B

SYNONYM AND ANTONYM READING SKILL GROUP
ATTITUDE QUESTIONNAIRE

Unit D

Name:

Date:

1. The synonym and antonym reading skill class is

_____ a. Very interesting

_____ b. Pretty interesting

_____ c. Interesting

_____ d. Not very interesting

_____ e. Not interesting at all

2. How much did you learn in your synonym and antonym reading skill class?

_____ a. A lot

_____ b. Some

_____ c. Not much

_____ d. Nothing

3. Learning about synonyms and antonyms was

_____ a. A lot of fun

_____ b. Fun sometimes

_____ c. Not much fun

_____ d. Not fun at all

READING SKILLS ATTITUDE QUESTIONNAIRE

Unit B

NAME:

DATE:

Put an X in the box next to the words that tell what you think.

1. Learning about compound words and base words and endings was:

   ☐ a. very interesting.

   ☐ b. pretty interesting.

   ☐ c. interesting.

   ☐ d. not very interesting.

   ☐ e. not interesting at all.

2. How much did you learn about compound words and base words and endings?

   ☐ a. a lot.

   ☐ b. some.

   ☐ c. not much.

   ☐ d. nothing.

3. Learning about compound words and base words and endings was:

   ☐ a. a lot of fun.

   ☐ b. fun sometimes.

   ☐ c. not much fun.

   ☐ d. not fun at all.

Appendix H

DATA FOR SUBJECTS IN UNITS D AND B ON ALL DEPENDENT MEASURES

TABLE 27

Data by Subject on all Dependent Measures: Unit D

Goal-Setting

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Synonyms & Antonyms	WTRSD Synonyms & Antonyms	Number of Goals Set	Difference	Confidence Score
1	1	1	07	06	32	14	33	03	2
2	1	1	03	09	29	12	31	01	3
3	1	1	00	09	33	15	30	14	7
4	1	2	02	08	28	11	35	19	5
5	1	2	00	07	29	16	24	08	5
6	1	3	03	07	30	11	24	08	5
7	1	3	00	09	27	07	30	14	6
8	2	1	06	06	33	15	32	02	3
9	2	1	15	07	33	15	40	03	3
10	2	1	10	08	30	15	26	01	4
11	2	2	18	09	33	14	38	11	2
12	2	2	02	09	30	13	34	18	5
13	2	2	09	07	28	09	33	05	4
14	2	3	08	08	30	11	40	24	7
15	2	3	00	02	21	04	18	02	4
16	2	3	07	09	16	07	33	09	4

Conference

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Synonyms & Antonyms	WTRSD Synonyms & Antonyms	Number of Goals Set	Difference	Confidence Score
17	1	1	10	09	31	09	29	13	6
18	1	1	04	09	32	12	41	03	6
19	1	1	15	09	33	11	39	09	7
20	1	2	02	09	32	11	30	03	5
21	1	2	18	02	31	11	38	08	6
22	1	2	01	02	25	07	34	18	4
23	1	3	05	02	25	09	40	17	7
24	1	3	00	04	28	14	41	10	7
25	1	3	09	09	28	12	39	23	7
26	2	1	09	07	32	15	20	04	6
27	2	1	05	09	34	11	36	06	6
28	2	1	03	05	36	13	41	03	5
29	2	2	06	08	27	15	40	03	4
30	2	2	03	07	31	11	41	11	4
31	2	2	04	04	32	13	41	11	4
32	2	3	05	09	31	14	36	19	7
33	2	3	04	09	33	08	34	07	4
34	2	3	09	07	21	10	35	19	4

Control

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Synonyms & Antonyms	WTRSD Synonyms & Antonyms	Number of Goals Set	Difference	Confidence Score
35	1	1	00	03	30	12	36	06	7
36	1	1	00	04	32	14	41	11	8
37	1	1	00	06	32	15	38	06	6
38	1	2	02	07	28	10	30	08	6
39	1	2	01	02	31	14	38	16	6
40	1	2	18	09	29	10	40	10	5
41	1	3	00	02	26	12	20	04	5
42	1	3	01	04	29	11	33	17	6
43	1	3	01	06	26	11	31	15	8
44	2	1	10	09	29	15	36	20	6
45	2	1	11	08	31	12	32	02	5
46	2	1	05	09	32	11	34	11	6
47	2	2	05	09	30	08	40	02	5
48	2	2	03	07	30	14	35	13	7
49	2	2	02	04	31	14	26	13	5
50	2	3	05	09	29	11	35	19	6
51	2	3	06	07	25	09	38	08	5
52	2	3	01	09	31	10	36	04	7

TABLE 28

Data by Subject on all Dependent Measures: Unit B

Goal-Setting

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Compound Words	WTRSD Compound Words	E-Developed Base Words	WTRSD Level B Base Words	WTRSD Level C Base Words	Number of Goals Set	Difference	Confidence Score
1	1	1	04	13	37	17	46	12	10	33	00	7
2	1	1	05	13	34	17	46	12	12	28	12	2
3	1	1	06	07	36	14	45	11	15	30	02	6
4	1	2	11	13	34	13	40	07	14	26	05	5
5	1	2	00	11	33	17	47	12	15	29	04	5
6	1	3	01	11	33	13	39	12	11	25	02	6
7	1	3	01	11	25	08	32	10	07	23	00	2
8	2	1	07	13	38	16	45	12	15	33	00	8
9	2	1	13	13	36	17	43	12	14	32	09	5
10	2	1	10	13	32	13	38	04	10	22	00	2
11	2	2	05	13	34	15	44	11	12	29	04	2
12	2	2	04	10	34	16	43	12	14	27	11	2
13	2	2	08	13	34	11	37	07	11	28	07	8
14	2	3	07	13	20	10	25	11	11	25	12	5
15	2	3	06	13	18	11	40	10	07	28	15	5
16	2	3	00	12	25	14	42	07	10	26	06	5

Conference

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Compound Words	WTRSD Compound Words	E-Developed Base Words	WTRSD Level B Base Words	WTRSD Level C Base Words	Number of Goals Set	Difference	Confidence Score
17	1	1	04	13	28	11	37	05	12	28	06	6
18	1	1	09	13	34	14	44	12	12	32	09	7
19	1	2	07	13	29	12	38	03	11	30	09	6
20	1	2	01	09	23	08	37	06	10	31	09	7
21	1	2	04	09	34	13	44	04	06	32	09	7
22	1	3	02	08	20	06	16	04	07	30	16	3
23	1	3	07	12	22	11	37	02	06	31	09	4
24	1	3	06	09	32	12	36	12	12	33	16	8
25	2	1	09	11	35	15	41	12	14	33	00	8
26	2	1	06	13	29	13	40	03	07	32	09	7
27	2	1	07	13	28	15	35	08	11	32	17	5
28	2	2	04	13	31	13	42	09	07	26	03	7
29	2	2	03	09	31	08	41	05	10	30	16	6
30	2	2	07	13	36	16	45	12	10	30	08	5
31	2	3	08	09	31	10	36	10	11	28	07	8
32	2	3	07	13	20	12	41	06	11	27	06	8
33	2	3	12	13	29	14	43	08	13	29	08	7

Control

S	Sex Male 1 Female 2	Previous Achievement High 1 Medium 2 Low 3	Reading Attitude	Skill Attitude	E-Developed Compound Words	WTRSD Compound Words	E-Developed Base Words	WTRSD Level B Base Words	WTRSD Level C Base Words	Number of Goals Set	Difference	Confidence Score
34	1	1	07	13	34	16	44	11	13	28	06	7
35	1	1	08	13	32	10	42	10	15	28	05	4
36	1	1	02	13	26	13	22	02	08	33	17	6
37	1	2	04	12	27	16	40	12	15	33	00	4
38	1	2	09	13	26	05	26	04	09	33	21	8
39	1	2	07	11	37	14	39	12	09	32	09	8
40	1	3	04	13	27	12	28	04	06	31	15	5
41	1	3	08	13	32	11	30	07	10	33	08	5
42	1	3	01	10	19	10	19	06	05	28	15	8
43	2	1	03	11	38	12	45	11	10	30	03	4
44	2	1	07	13	33	15	42	08	08	30	15	7
45	2	1	07	13	33	11	40	12	11	33	12	3
46	2	2	06	12	36	16	41	11	05	29	06	8
47	2	2	09	13	32	12	32	12	10	33	20	5
48	2	2	08	11	23	10	39	04	09	27	11	6
49	2	3	07	11	28	05	39	12	09	30	15	4
50	2	3	01	12	25	08	42	07	09	29	12	2
51	2	3	05	13	21	14	35	12	07	28	13	3

Appendix I

MAGNITUDE, DIRECTION, AND MEAN DIFFERENCE SCORES AS A FUNCTION OF TREATMENT IN UNITS D AND B

Table 29

Frequency Table Representing Magnitude and Direction of Difference Scores (Number of Goals Set Minus Number of Goals Attained) as a Function of Treatment: Unit D

	Treatment Group		
	Goal-Setting N=16	Conference N=18	Control N=18
Number of S's who attained 11-15 more goals than they set	1	0	0
Number of S's who attained 6-10 more goals than they set	0	1	2
Number of S's who attained 1-5 more goals than they set	1	2	1
Number of S's who attained the same number of goals as they set	0	0	0
Number of S's who attained 1-5 fewer goals than they set	6	3	3
Number of S's who attained 6-10 fewer goals than they set	3	4	3
Number of S's who attained 11-15 fewer goals than they set	2	3	5
Number of S's who attained 16-20 fewer goals than they set	2	4	4
Number of S's who attained 21-25 fewer goals than they set	1	1	0

Table 30

Mean Difference Scores as a Function of Treatment: Unit D

	Goal-Setting	Conference	Control
Sum of Difference scores	-108	-161	-149
Number of S's	16	18	18
Average Difference Score	-6.75	-8.9	-8.3

Table 31

Frequency Table Representing Magnitude and Direction of Difference Scores (Number of Goals Set Minus Number of Goals Attained) as a Function of Treatment: Unit B

	Treatment Group		
	Goal-Setting N=16	Conference N=17	Control N=18
Number of S's who attained 1-5 more goals than they set	1	0	1
Number of S's who attained the same number of goals as they set	4	1	1
Number of S's who attained 1-5 fewer goals than they set	4	1	1
Number of S's who attained 6-10 fewer goals than they set	3	11	4
Number of S's who attained 11-15 fewer goals than they set	3	0	8
Number of S's who attained 16-20 fewer goals than they set	1	4	2
Number of S's who attained 21-25 fewer goals than they set	0	0	1

Table 32

Mean Difference Scores as a Function of Treatment: Unit B

	Goal-Setting	Conference	Control
Sum of Difference scores	-81	-157	-197
Number of S's	16	17	18
Average Difference Score	-5.1	-9.2	-10.9

Appendix J

DESCRIPTION OF EXPERIMENTAL POPULATION

Description of Experimental Population

Age: Students in Units D and B of a multi-Unit elementary school served as subjects in the study. Students in Unit D would normally be in grades 3 and 4, while students in Unit B would normally be in grades 1 and 2. Students in Unit D would be 8 and 9 years of age while students in Unit B would be 6 and 7 years old.

Sex: Students in the experimental population were equally divided between males and females within each Unit.

Socio-Economic status: The school from which the experimental population was drawn is located in an upper lower-class neighborhood. Many of the parents are employed in nearby manufacturing plants. Thirty per cent of the students in the school are from either ADC or welfare homes and over fifty per cent are from broken homes.

Race: All students in the school from which the experimental population was drawn are Caucasian.

Appendix K

TECHNICAL CHARACTERISTICS OF EXPERIMENTER-DEVELOPED TESTS

Table 32

Technical Characteristics of Experimenter-Developed Tests

Test	Number of Items	Mean Score	Standard Deviation	Range of Scores	Standard Error of Measurement	Hoyt Reliability
Unit D: Synonyms and Antonyms	37	29.26	4.02	21	2.6367	.7425
Unit B: Compound Words	44	29.67	5.83	22	2.4362	.7908
Base Words and Endings	48	38.04	7.31	31	2.0121	.8865

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